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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/285,772 | 04/05/1999 | KAORU YAMAMOTO | Q53891 | 4120 |

7590 07/07/2004

SUGHRUE MION ZINN MACPEAK AND SEAS
2100 PENNSYLVANIA AVENUE NW
WASHINGTON, DC 20037

EXAMINER

FLETCHER, JAMES A

| ART UNIT | PAPER NUMBER |
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2615

22

DATE MAILED: 07/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/285,772

Applicant(s)

YAMAMOTO ET AL.

Examiner

James A. Fletcher

Art Unit

2615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 27-46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 27-46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The disclosure is objected to because it does not recite the claim limitation of a "simple audio player." The specification mentions an "unsophisticated audio player," which the applicant's representative has asserted is synonymous with "simple audio player." All claim language used must be in the specification. The examiner suggests either adding the term "simple" to the specification, or amending the claims to read "unsophisticated."

Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 27-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Endoh et al (5,896,358), further in view of Nagasawa (5,809,201), and further in view of Heo (6,449,227).

Regarding claim 27, Endoh et al disclose an information recording medium comprising:

- an audio zone including a substantive data, a first control data, and a second control data for reproducing the substantive data (Col 3, lines 11-16 "the first audio data including a first code information items for determining a surround

mode... and second audio data including a second code information items for determining a special-use mode”), an audio title set and an audio manager for managing the audio title set (Col 14, lines 1-2 “title sets can be provided as the video title sets” and Col 13, lines 35-38 “the volume and file structure is a hierarchic structure and contains a volume and file structure area, a video manager [VMG], at least one video title set (VTS), and other recorded areas), wherein the audio title set includes the substantive data and the first control data (Col 3, lines 11-12 “first audio data including a first code information items”), and;

- the substantive data including a plurality of sets of information each to be reproduced independently, the substantive data including audio data and being logically divided into one or a plurality of tracks (Col 14, line 57 “a collection of hit songs”); wherein the first control data being required when reproducing the substantive data (Col 3, lines 11-16 “the first audio data including a first code information items for determining a surround mode... and second audio data including a second code information items for determining a special-use mode”); and the second control data being required when reproducing the substantive data by a simple audio player (Col 5, lines 26-28 “data indicating whether the audio data items are for use in the surround mode or for special use, such as karaoke” and Col 13, lines 40-41 “As with a conventional CD, a logical sector is defined as a set of 2048

blocks” Endoh et al identifies compatibility with their disc and a “simple” audio CD player.).

Further regarding claim 27, Endoh et al suggest a location for the second control data recording (Col 28, lines 51-54 “At the head of the audio packets, a packet header is positioned. In the packet header, a stream id indicating what the pack is intended for has been written”) but do not specifically disclose that it is at the head of the audio zone.

Nagasawa teaches the placement of the reproduce control information at the head of the audio zone (Col 5, lines 48-49 “Address data and a header signal being preformatted at the head of each...information block”). Providing a known and stable location for header data makes finding of the data by the reproduction device simple, and reduces the overhead requirements of the player.

Therefore, it would have been obvious to one of ordinary skill in the art to divide the signals into zones and provide control information in the headers of those zones.

Further regarding claim 27, Endoh et al do not disclose video title sets located after the head of the video zone (Fig 7), suggesting similar treatment of audio title sets, but do not specifically disclose the location of audio title sets not at the head of the audio zone.

Heo teaches audio title sets located throughout the audio zone, particularly after the Audio Manager (Fig 10 illustrates the arrangement of audio title sets within the audio zone).

As suggested by Endoh et al and taught by Heo, audio title sets are arranged in the audio zone such that they are not at the head of the zone, allowing a plurality of audio title sets to exist in one zone, and allowing for header data of the zone to manage the audio title set for reproduction.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Endoh to specify the audio title sets as not being located at the head of the audio zone.

Regarding claim 28, Endoh et al disclose a recording medium wherein

- the substantive data including one or a plurality of titles, each corresponding to a logical set including the one of the plurality of tracks (Col 14, line 57 “a collection of hit songs”); and
- the first control data being dispersed on the basis of the titles to be recorded on the recording medium (Col 19, lines 10-11 “Each video title set...is made up of one or more video titles” and Col 28, lines 51-54 “At the head of the audio packets, a packet header is positioned. In the packet header, a stream id indicating what the pack is intended for has been written”).

Regarding claim 29, Endoh et al disclose a recording medium wherein

- each of the one or the plurality of tracks comprises either a first track or a second track (Col 5, lines 33-37 “a normally used first-type accompanying sound selectively made unused is generated by using at least one of the main audio signals for special use, and a second-type accompanying sound for which whether it is selectively used and normally unused”);

- the first track being reproduced by using both of the first control data and the second control data (Col 5, lines 43-45 “the first- and second-type accompanying sounds can be selected by the user. According to the selection, the audio data items can be mixed”); and
- the second track being reproduced by using the first control data (Col 3, lines 27-28 “setting the outputting means in a selective setting mode in response to the sensing of the second code information”).

Regarding claim 30, Endoh et al disclose a recording medium wherein

- the first control data being required when using a reproducing apparatus capable of reproducing each of the one or the plurality of tracks; and
- the second control data being required when using a simple audio player capable of reproducing a part of the one or the plurality of tracks (Col 5, lines 26-28 “data indicating whether the audio data items are for use in the surround mode or for special use, such as karaoke”).

Regarding claim 31, Endoh et al disclose a recording medium wherein the simple audio player is capable of reproducing the part of the one or the plurality of tracks only in two or less channels (Col 4, line 63 “providing two or more front channels”).

Regarding claim 33, Endoh et al disclose a recording medium wherein

- the first control data being required when reproducing the substantive data in a plurality of available reproduce patterns (Col 3, lines 12-15 “a first code information items for determining a surround mode...and second audio data

including a second code information items for determining a special-use mode"); and

- the second control data being required when reproducing the substantive data in one of the plurality of available reproduce patterns (Col 5, lines 26-28 "data indicating whether the audio data items are for use in the surround mode or for special use, such as karaoke").

Regarding claim 34, Endoh et al disclose a recording medium wherein the second control data being required when reproducing the substantive data in two or less channels (Col 3, lines 14-16 "second audio data including a second code information items for determining a special-use mode" and Col 4, line 63 "providing two or more front channels").

Regarding claims 32 and 35, Endoh et al disclose a recording medium wherein the simple audio player is capable of reproducing the part of the one or the plurality of tracks only in Linear Pulse Code Modulation (Col 22, lines 10-11 "When '100' is written for the audio coding mode, this means that the audio data is coded by linear PCM").

Regarding claim 36, Endoh et al disclose a recording medium wherein the second control data at least includes address information, attribute information and reproduce time each relating to the one or the plurality of tracks (Col 15, lines 48-53 "a mandatory table, recording the size of the video manager, the start address of each piece of the information in the video manager, and the start address of and the attribute information about the video object set").

Regarding claim 37, please see examiner's remarks regarding claim 27.

Further regarding claim 37, Endoh et al disclose:

- a reading section which reads data from the information recording medium (Col 12, lines 36-38 “The optical head converts the beam reflected from the optical disk into an electric signal”);
- a reproducing section which reproduces the substantive data (Col 12, lines 61-63 “The playback data is reproduced from the specific sector by the optical head, which then supplies it to the head amplifier”);
- a controlling section which controls the reading section and the reproducing section (Fig. 4, item 54 “System Processor Section”); and wherein
 - the control section acquires the second control data (Col 30, lines 59-61 “the system CPU section 50 gives a read instruction to the disk drive section 30 to read the contents of the volume and file structure area”); and
 - the control section reproduces the substantive data on the basis of the second control data (Col 30, lines 63-66 “The system CPU section extracts information about the recording position and recording size of each file and management information necessary for other managing actions”).

Regarding claim 38, Endoh et al disclose an information reproducing apparatus comprising:

- a storing section (Fig 4, item 52, “System ROM/RAM Section” and item 56 “Data RAM Section”);

- wherein the control section acquires the second control data after the information recording medium being installed into the information reproducing apparatus and stores the second control data in the storing section (Col 30, lines 63-66 "The system CPU section extracts information about the recording position and recording size of each file and management information necessary for other managing actions").

Regarding claims 39 and 45, Endoh et al disclose an information reproducing apparatus comprising:

- an indicating section which indicates a track to be reproduced (Col 14, lines 26-27 "the volume names of collections of pops hit songs");
- wherein the controlling section acquires information relating to a track from the second control data stored in the storing section (Col 14, lines 19-24 "the volume name of the optical disk and the explanation of audio and sub-picture accompanied by the display of the volume name are displayed by the video object set [VMGM_VOBS] for VMGM and selectable items are displayed by the sub-picture"); and
- the track is indicated by the indicating section (Col 14, lines 31-32 "the name of the hit song is displayed").

Regarding claims 40 and 41, please see examiner's remarks regarding claim 37.

Further regarding claims 40 and 41, Endoh et al disclose a control section (Fig. 4, item 54 "System Processor Section"), which reproduces the substantive data on the

basis of the first control data (Col 3, lines 11-12 "first code information items for determining a surround mode").

Further regarding claims 40 and 41, please see examiner's remarks regarding claim 27.

Regarding claim 42, please see examiner's remarks regarding claim 38.

Regarding claim 43, Endoh et al disclose an information reproducing apparatus comprising an indicating operation which indicates a track to be reproduced (Col 14, lines 26-27 "the volume names of collections of pops hit songs").

Regarding claim 44, please see examiner's remarks regarding claims 27, 40 and 41.

Regarding claim 46, please see examiner's remarks regarding claim 43.

4. The examiner wishes to note again that the term "simple" as describing the audio player in the claims is a relative term, implying a lack of features not denoted either in the claims or in the specification. The term "simple" has no reference and therefore does not limit the claims in any way.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James A. Fletcher whose telephone number is (703) 305-3464. The examiner can normally be reached on 7:45AM - 5:45PM M-Th, first Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Christensen can be reached at (703) 308-9644.

Any response to this action should be mailed to:

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Commissioner of Patents and Trademarks

Washington, DC 20231


or faxed to:

(703) 872-9314 (for Technology Center 2600 only).

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

JAF
June 28, 2004


VINCENT BOCCIO
PRIMARY EXAMINER